

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 77-48

WASTEWATER RECLAMATION REQUIREMENTS FOR
CITY AND COUNTY OF SAN FRANCISCO,
SAN FRANCISCO INTERNATIONAL AIRPORT,,
SAN MATEO COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, finds that:

1. City and County of San Francisco, San Francisco International Airport, hereinafter called the discharger, submitted a report of waste discharge dated March 30, 1977.
2. The discharger proposes to divert approximately 70,000 gallons per day of effluent from the Airport's secondary treatment plant for irrigation of Airport landscaping and for use in dust control and earth compaction at various construction sites within the Airport's property. This Program will be in effect only when domestic water supplies are determined not to be sufficient for those purposes.
3. Reclaimed wastewater used for irrigation will be applied on landscaped strips located on Airport property. These strips include an auto parking area where the public can watch the planes take off; median strips at the Airport's entrance road, planting strips along the frontage roads, and scattered small areas of trees and bushes. All areas are within the Airport's property and are shown in attachment A, which is hereby made part of this Order.
4. Reclaimed water will be loaded into tank trucks at the sewage treatment plant and trucks will then haul the water to the sites where needed. These trucks will only be used for this purpose. At the Airport entrance road, there will be two 10,000 gallons storage tanks where the reclaimed wastewater will be pumped to a newly installed sprinkler system for irrigating the planting strips. This sprinkler system will have no connections to the domestic potable water supply. All other areas will be irrigated directly from the transport truck using hand-held hoses.

The Airport will be responsible for the day to day coordination and controls of trucking and application.

5. Section 13523 of the California Water Code provides that a regional board, after consulting with and receiving the recommendations of the State Department of Public Health, and if it determines such action to be necessary to protect the public health, safety, or welfare, shall prescribe water reclamation requirements for water which is used or proposed to be used as reclaimed water. The use of reclaimed water for the purposes specified in Paragraphs 2 and 3 could affect the public health, safety, or welfare, and requirements for those uses are therefore necessary in accordance with the Water Code.
6. The Board adopted a Water Quality Control Plan for the San Francisco Bay Basin in April 1975. The water quality objectives for reclaimed wastewater, as set forth in the Basin Plan specify those limits prescribed in Title 17, Section 8025 through Section 8050, California Administrative Code. These objectives have been superseded by Title 22, Section 60501 - 60357, California Administrative Code (Statewide Reclamation Criteria).
7. The wastewater reclamation requirements are in conformance with the statewide reclamation criteria established by the State Department of Health and are in conformance with the Policy and Action Plan for Water Reclamation adopted by the State Water Resources Control Board in January 1977.
8. The proposed use of reclaimed wastewater involves a minor alteration to land and as such is exempt from the provisions of the Environmental Quality Act of 1970 as a class 4 exemption pursuant to Section 15104 of the California Administrative Code (State EIR Guidelines). The project will not have a significant effect on the environment.
9. This Regional Board has notified the discharger and interested agencies and persons of its intent to prescribe wastewater reclamation requirements for the proposed uses.
10. This Board at a public meeting heard and considered all comments pertaining to this reuse.

IT IS HEREBY ORDERED, that the discharger and the users listed in the title in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, shall comply with the following:

A. Reclaimed Wastewater Use Specifications

1. The treatment distribution or reuse of reclaimed water shall not create a nuisance as defined in Section 13050(m) of the California Water Code.

2. The reclaimed water shall be at all times an adequately disinfected, oxidized water and shall meet the following quality limits at all times:

5-day BOD	40.0 mg/l, maximum
Dissolved Oxygen	1.0 mg/l, minimum
Dissolved Sulfide	0.1 mg/l, maximum
Coliform Organisms	Median MPN shall not exceed twenty-three (23) coliform organisms per 100 milliliters of sample at some point in the treatment process. The median value will be determined from the bacteriological results of the last seven (7) analyses.

3. All storage tanks, tank trucks and spray equipment which may at any time contain waste shall be adequately and clearly identified with warning signs and discharger and user shall make all necessary provisions, in addition, to inform the public that the liquid contained is sewage and is unfit for human consumption. The storage tanks shall be secured against unauthorized use.

B. Reclaimed Wastewater Use Prohibitions

1. No wastewater shall be applied to the use areas during periods of rainfall or when soils are saturated.
2. No reclaimed wastewater used for irrigation shall be allowed to escape the specified use areas, either by surface flow or airborne spray.
3. No reclaimed wastewater shall be applied for uses on locations other than those specified in attachment A, and no wastewater shall be disposed of into storm sewers.
4. Wastewater shall not be applied to disposal areas in such a manner as to expose airline passengers or other individuals to contact with spray droplets.

C. Provisions

1. Each truck driver hauling reclaimed wastewater shall be instructed as to the requirements contained herein and the potential health hazards associated with the reuse of wastewater.
2. This Order includes items numbered 1 through 8 of the attached "Standard Provisions for the Use of Reclaimed Water" dated March 15, 1973.
3. No reclaimed wastewater to be applied for the uses specified in this Order shall be dechlorinated.
4. The discharger is required to submit each month a report according to the schedule for sampling, measurement, and analysis given in Table I (attached).

5. The user and discharger shall permit the Regional Board or its authorized representative:
 - a. Entry upon premises in which an effluent source is located or in which any required records are kept.
 - b. Access to copy any records required to be kept under terms and conditions of this Order.
 - c. Inspection of any monitoring equipment or method required by this Order.
 - d. Sampling of any discharge.
6. The user and discharger shall maintain in good working order and operate as efficiently as possible any facility or control system installed by the user to achieve compliance with the water reclamation requirements.
7. The discharger and users shall take all measures necessary to minimize public contact with reclaimed wastewater.

I, Fred H. Dierker, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on May 17, 1977.

FRED H. DIERKER
Executive Officer

Attachments:

"Standard Provisions for the Use of
Reclaimed Wastewater" dated 3/15/73
Self-Monitoring Program
Table I
Attachment A - Map

TABLE I
SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSES

SAMPLING STATIONS	E-001								
TYPE OF SAMPLES <u>2/</u>	G								
Reclaimed Wastewater Volume (gallons/day)	D <u>3/</u>								
Coliforms (MPN)	D								
Chlorine Residual (mg/l)	2H or cont 1/								
Dissolved Sulfide	W								
BOD (mg/l)	W								
Dissolved Oxygen	D								
All Applicable Standard Observations	W								

LEGEND

Type of Sample
G = grab sample
O = observation

Frequency of Sampling
2H = every 2 hours
D = daily
W = once each week
2W = every 2 weeks

Station
E-001 = station representative of
treatment plant effluent
being diverted for reclamation

- 1/ Samples shall be taken during working hours provided all tank trucks and/or storage tanks are filled during this period of time
- 2/ Samples are required to be taken only on days any reclaimed wastewater is being diverted
- 3/ A record shall be kept of volumes used for irrigation, dust control and earth compaction.

